

What is claimed is:

- 1 1. A method, comprising:
2 specifying a process definition task structure including a plurality of tasks;
3 dynamically binding a plurality of selected resources to the plurality of
4 tasks;
5 configuring a cache to store at least one process information element
6 included in the plurality of tasks and at least one datum having a value;
7 scheduling the plurality of resources to execute the plurality of tasks; and
8 executing the plurality of tasks.
- 1 2. The method of claim 1, wherein dynamically binding a plurality of selected
2 resources to the plurality of tasks further comprises:
3 identifying a plurality of intrinsic properties associated with a plurality of
4 designated resources;
5 identifying a plurality of assignable properties associated with the plurality
6 of designated resources; and
7 defining a plurality of query predicates associated with the plurality of
8 designated resources.
- 1 3. The method of claim 2, wherein dynamically binding a plurality of selected
2 resources to the plurality of tasks further comprises:
3 registration of the pluralities of intrinsic and assignable properties with at
4 least one resource directory;
5 locating a plurality of resource directories including the at least one resource
6 directory; and
7 searching the plurality of resource directories to find the plurality of selected
8 resources associated with the plurality of designated resources.
- 1 4. The method of claim 1, wherein configuring a cache to store at least one
2 process information element included in the plurality of tasks and at least one datum
3 having a value further comprises:

4 configuring a plurality of access control rules associated with the plurality of
5 selected resources; and
6 delivering a plurality of access credentials associated with the plurality of
7 access control rules to the plurality of selected resources.

1 5. The method of claim 1, wherein configuring a cache to store at least one
2 process information element included in the plurality of tasks and at least one datum
3 having a value further comprises:
4 distributing at least one software module to at least one of the plurality of
5 selected resources; and
6 distributing the plurality of tasks to the plurality of selected resources.

1 6. The method of claim 1, wherein configuring the cache to store at least one
2 process information element included in the plurality of tasks and at least one datum
3 having a value further comprises:
4 pre-fetching the value of the at least one datum; and
5 storing the value of the at least one datum in the cache.

1 7. The method of claim 1, further comprising:
2 revising the value of the datum stored in the cache.

1 8. The method of claim 7, wherein revising the value of the datum stored in the
2 cache further comprises:
3 requesting the value of the datum from a data source;
4 marking the datum at the data source using a tag associated with a selected
5 one of the plurality of tasks stored in the cache;
6 receiving an update notification for the value of the datum; and
7 replacing the value of the datum with an updated value for the datum.

1 9. The method of claim 8, further comprising:
2 removing the tag when the selected one of the plurality of tasks is purged
3 from the cache.

1 10. The method of claim 1, further comprising:
2 monitoring a plurality of results associated with executing the plurality of
3 tasks.

1 11. An information processing system, comprising:
2 a specification module to specify a process definition task structure
3 including a plurality of tasks;
4 a binding module to dynamically bind a plurality of selected resources to the
5 plurality of tasks, the binding module capable of being communicatively coupled to
6 the specification module;
7 a cache to store at least one process information element included in the
8 plurality of tasks and at least one datum having a value, the cache capable of being
9 communicatively coupled to the specification module; and
10 a scheduling module to schedule the plurality of resources to execute the
11 plurality of tasks, the scheduling module capable of being communicatively coupled
12 to the specification module.

1 12. The information processing system of claim 11, further comprising:
2 a cache update module capable of being communicatively coupled to the
3 cache.

1 13. The information processing system of claim 11, further comprising:
2 a monitoring module to monitor a plurality of results associated with executing the
3 plurality of tasks, the monitoring module capable of being communicatively coupled
4 to the specification module.

- 1 14. The information processing system of claim 11, wherein the specification
2 module and the scheduling module are included in a first computer.
- 1 15. The information processing system of claim 14, wherein the binding module
2 and the cache are included in a second computer capable of being communicatively
3 coupled to the first computer.
- 1 16. An article comprising a machine-accessible medium having associated data,
2 wherein the data, when accessed, results in a machine performing:
3 specifying a process definition task structure including a plurality of tasks;
4 dynamically binding a plurality of selected resources to the plurality of
5 tasks;
6 configuring a cache to store at least one process information element
7 included in the plurality of tasks and at least one datum having a value;
8 scheduling the plurality of resources to execute the plurality of tasks; and
9 executing the plurality of tasks.
- 1 17. The article of claim 16, wherein the machine-accessible medium further
2 includes data, which when accessed by the machine, results in the machine
3 performing:
4 identifying a plurality of intrinsic properties associated with a plurality of
5 designated resources;
6 identifying a plurality of assignable properties associated with the plurality
7 of designated resources; and
8 defining a plurality of query predicates associated with the plurality of
9 designated resources.
- 1 18. The article of claim 17, wherein the machine-accessible medium further
2 includes data, which when accessed by the machine, results in the machine
3 performing:

4 registration of the pluralities of intrinsic and assignable properties with at
5 least one resource directory;
6 locating a plurality of resource directories including the at least one resource
7 directory; and
8 searching the plurality of resource directories to find the plurality of selected
9 resources associated with the plurality of designated resources.

1 19. The article of claim 16, wherein the machine-accessible medium further
2 includes data, which when accessed by the machine, results in the machine
3 performing:
4 revising the value of the datum stored in the cache.

1 20. The article of claim 16, wherein the machine-accessible medium further
2 includes data, which when accessed by the machine, results in the machine
3 performing:
4 requesting the value of the datum from a data source;
5 marking the datum at the data source using a tag associated with a selected
6 one of the plurality of tasks stored in the cache;
7 receiving an update notification for the value of the datum; and
8 replacing the value of the datum with an updated value for the datum.

1 21. An article comprising a machine-accessible medium having associated data,
2 wherein the data, when accessed, results in a machine performing:
3 specifying a process body including a plurality of tasks; and
4 specifying a process state having execution state information.

1 22. The article of claim 21, wherein specifying the process body further
2 comprises:
3 specifying at least one operation conducted at a resource discovery location
4 by a selected resource having a resource profile.

1 23. The article of claim 22, wherein specifying the at least one operation further
2 comprises:
3 specifying a service type, an interface definition, and parameter data.

1 24. The article of claim 23, wherein specifying the parameter data further
2 comprises:
3 specifying a datum to be revised at a data discovery location by a selected
4 repository having a repository profile.

1 25. The article of claim 21, wherein specifying the process state further includes:
2 specifying a process instance identification, a process execution status, and
3 at least one task result associated with a selected one of the plurality of tasks.

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